

# United States Department of the Interior

## NATIONAL PARK SERVICE

Southeast Utah Group
Arches and Canyonlands National Parks
Hovenweep and Natural Bridges National Monuments
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July 31, 2014

To:

Southeast Utah Group (SEUG) Files

From:

Superintendent, Arches and Canyonlands National Parks

Subject:

Four Wheel Drive Requirement Determination for Arches and Canyonlands

#### **PURPOSE**

To enhance visitor safety and resource protection by requiring four wheel drive vehicles on backcountry roads within Arches and Canyonlands National Parks. The following determination provides justification for this new requirement (refer to the Superintendent's Compendium for each park).

#### **DEFINITION**

A four wheel drive vehicle is defined as a sport utility vehicle (SUV) or truck with at least 15-inch tire rims and at least eight inches of clearance from the lowest point of the frame, body, suspension, or differential to the ground. Four wheel drive vehicles have a transfer case between the front and rear axles that locks the front and rear drive shafts together when four wheel drive is engaged. All wheel drive (AWD) vehicles do not meet this definition.

### **JUSTIFICATION**

Many of the backcountry roads in the SEUG are affected by flooding, snow, ice, quicksand, deep sand, ledges and rock fall. Road conditions and obstacles can be permanent, occur regularly, and/or change unexpectedly, especially during the winter and summer monsoon seasons.

When maintenance is necessary to clear road obstructions from park roads front country roads are the highest priority, resulting in a delayed response to backcountry roads. Therefore, visitors using backcountry roads are more likely to encounter obstructions and hazards until maintenance crews can respond. During winter, little to no maintenance is performed on the backcountry roads, resulting in frequent snow accumulations in shaded areas - especially in locations such as Elephant Hill and Murphy Hogback where deep snow can occur.

Four wheel drive vehicles provide the minimum necessary mechanical advantage to negotiate these types of road conditions and obstacles. Often times tire chains, a winch, or another vehicle(s) is necessary to safely travel these backcountry roads. Visitors who become stranded in the backcountry along these roads may incur property damage and/or suffer personal injury.

SEUG's Routine Maintenance Plan for Unpaved Roads outlines that backcountry roads will be maintained to a standard which allows rock protrusions between six and nine inches high. Standard two wheel drive vehicles do

not provide sufficient clearance to avoid road obstacles higher than six inches. Therefore, operators of low clearance vehicles are more likely to drive off road to avoid these obstacles, resulting in damage to plants and sensitive desert soils, road erosion and road widening.

#### **CONCLUSION**

Four wheel drive vehicles generally have higher clearance and the drive train capability to negotiate road obstacles on backcountry roads within Arches and Canyonlands National Parks. This capability enhances visitor safety and resource protection. Therefore, four wheel drive motor vehicles are required on the following roads:

Arches National Park: the unpaved, backcountry road between Tower Arch and Balanced Rock

Canyonlands National Park: Elephant Hill, Salt Creek, Horse Creek, Davis Canyon, Lavender Canyon, Colorado Overlook, and the White Rim

Kate Cannon Superintendent

Arches and Canyonlands National Parks